



National Aeronautics and Space Administration  
Goddard Space Flight Center

Wallops Flight Facility, Wallops Island, Virginia

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# Inside Wallops

## NASA Launches High School Experiments

High school students from four states traveled to the Eastern Shore of Virginia last week to see their experiments fly on a suborbital rocket mission. The single stage Orion sounding rocket was successfully launched May 6, 1998 from Wallops Island.

The experiments are part of the Suborbital Student Experiment Module, a pilot program to develop a payload system that allows students in primary school through high school to propose experiments for flight and launch them aboard a NASA sounding rocket within one school year.

Lynn Marra, head of Student Programs in the Education Division, NASA Headquarters, Washington, D.C., said, "The students in the pilot program have shown great ingenuity in the design and assembly of their experiments. We are very excited with the future possibilities of this new and innovative program."

Keith Koehler, Wallops project coordinator, said, "The students coming to Wallops and participating in the launch process is a major part of this program. We want to give the students the opportunity to participate and gain an understanding of all aspects of a rocket mission from experiment design through data analysis."

"During the week the students participated in the final payload preparations, took an active part in the launch countdown and presented the preliminary results. This will be a week they will always remember," Koehler said.

Four experiments flew on the Orion sounding rocket to an altitude of 27 miles. The payload impacted in the Atlantic Ocean approximately 17 miles off the coast of Wallops Island. The U.S. Coast Guard, Cape May, NJ and Chincoteague, VA., recovered the payload and returned the experiments to the students the evening of the launch.

The experiments included the study of the efficiency of electric motor

lubricants during launch, the heat transfer of materials, atmospheric measurements, and the effects of acceleration on zebra fish embryos.

The participating schools were Worcester Country School, Berlin, MD.; Southern High School, Baltimore; North Carolina School of Science and Mathematics, Durham; Sauk Rapids/Rice High School, MN.; and Glenbrook North High School, Northbrook, IL. The Glenbrook experiment was serving as a backup.

The student teams submitted experiment proposals in December. At the same time, personnel from the Wallops Flight Facility began design of the payload system. Fabrication of the experiments and payloads began in late February and the experiments arrived at Wallops for integration and testing the week of April 20.

Koehler said, "The development and execution of this program has been on an extremely fast track. The student and Wallops payload teams have done a tremendous job of meeting the schedule."

The NASA payload system provided power and data recording systems to each deck and video cameras for two of the experiment decks. Each school was provided a 14-inch diameter deck plate on which to mount their experiment. The cost of the experiment components for each school varied from \$20 to \$250.

The pilot program is a joint effort between the Offices of Human Resources and Education, Space Science, and Space Flight at NASA Headquarters.

### Headquarters Note:

NOW ON-LINE the Professional Development Program (PDP) homepage. Created by the 1997-1998 PDP class, this site provides all NASA employees up-to-date, useful information on all aspects of travel between centers. Information on housing, moving, travel reimbursement and center operations are relevant to any NASA employee on long-term travel. <http://www.hq.nasa.gov/office/codef/codeft/pdp/>



Sauk Rapids High School students inspect experiment following successful Sub-SEM flight.

## NASA Awards \$131 Million Contract Option To CSC

NASA's Marshall Space Flight Center in Huntsville has exercised an option to continue an existing contract with Computer Sciences Corp. (CSC), Falls Church, VA, for the provision of a myriad of information services to Marshall and to NASA agency wide.

The priced option, valued at \$131,845,510, covers the period May 1, 1998, through April 30, 1999. It continues efforts under a contract titled Program Information Systems Mission Services (PrISMS), which was awarded to CSC in 1994.

Work performed by CSC and its subcontractors under PrISMS includes support to Marshall in the areas of computer systems, applications software, networks and telephone systems, data reduction and audio-video services.

It also includes a range of services in support of the entire agency, including management of several wide-area networks, agency wide information management systems, and the NASA Automated Data Processing Consolidation Center.

The option is the third of a possible six priced options. The PrISMS contract has an approximate total value, if all options are exercised, of \$1.053 billion.

## NOAA-K Launch Scheduled

The launch of NOAA-K, a National Oceanic and Atmospheric Administration (NOAA) spacecraft, is scheduled for 11:52 a.m. EDT Wednesday, May 13 from Vandenberg Air Force Base, CA.

The spacecraft was built by Lockheed Martin Missiles and Space Co. under contract to the Goddard Space Flight Center.

Goddard is responsible for the construction, integration, launch and verification testing of the spacecraft, instruments and unique ground equipment.

NOAA-K will provide a polar orbiting platform to support environmental monitoring instruments which will image and measure the Earth's coupled systems--- its atmosphere, its surface and cloud cover. Observations will include information about Earth radiation, seas and land temperature, atmospheric vertical temperature and water vapor.

Monthly Weather Summary  
by Jim Buchanan, Meteorologist

April showers bring May flowers. This year there may be a few less than usual. Rainfall for April was one-quarter inch below normal. The total recorded rainfall for April was 2.39 inches. April is typically one of the drier months. There were nine days with measurable rainfall. The 24-hour maximum was 1.3 inches recorded on May 4.



We continued to enjoy warmer than normal temperatures as the influence of the strong winter El Nino affects the atmosphere. No record highs or lows were recorded during April, although a couple of frontal systems resulted in a few chilly nights. The warmest reading was 78 degrees Fahrenheit on April 26. The coolest was 33 degrees recorded April 13. Daytime highs averaged 63.5 degrees, with the low being only 46 degrees. Daily readings averaged 54.8 degrees, which is 1.5 degrees warmer than normal.

The April 4 low pressure and frontal system also was responsible for the strongest winds, 56 mph, recorded during April. This was the only occasion during the month when winds exceeded 40 mph. The average wind for the month was 10.2 mph.

June is the start of the summer and hurricane season. Average daytime highs are 80 degrees with nighttime lows averaging 62.5 degrees, for a daily average temperature of 71.3 degrees. Temperature extremes for June are a record high of 97 degrees and a low reading of 40 degrees. There are usually eight days with measurable rainfall, for an average of 3.09 inches for the month.

Early predictions for this year's Atlantic hurricane season have prompted forecasters to come up with names for 10 storms. They are: Alex, Bonnie, Charley, Danielle, Earl, Frances, George, Hermine, Ivan and Jeanne. Most storms affecting the Eastern Shore normally occur in August and September. Start preparing now to gather emergency supplies and become familiar with evacuation routes. Don't wait until it's too late!

Katie 'D' Takes Honors

The Cinco de Mayo celebration went well and was well attended, according to organizer, Gerry McIntire.

"Katie 'D'" drew the top honors in the chili compen, and Catherine Donnelly went home with the People's Choice Award.

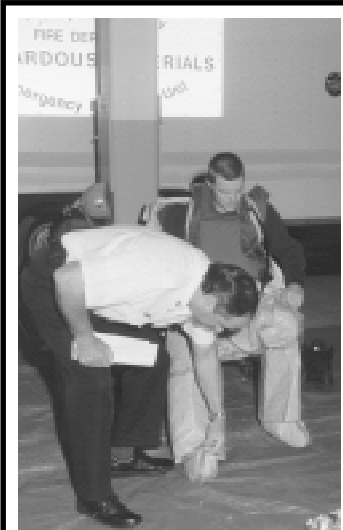
Entries in the chili compen also were submitted by Peggy Skeoch, Ruth Thomas, and Brenda McIntire. It was reported that all the entries were eaten.



Take Our Children to Work Day Fun and Fascinating

Take Our Children to Work Day, April 23, provided a unique opportunity for nearly 70 boys and girls to investigate possible career choices. During the day, children participated in several events organized by the Wallops NASA and Navy AEGIS Federal Women's Program Committees.

Children played parts in a mock Pegasus launch, shot down a simulated Navy target, enjoyed numerous fascinating science experiments, climbed into an airplane cockpit, tried on protective suits for cleaning up hazardous waste, learned about barrier island erosion and bird banding techniques. They also were



Wallops Fire Chief, Joe Conaty assists Fireman, Joe Colona with the protective suit during a hazardous material demonstration.

given a chance to investigate using the Internet. Others participated in a video tele-conference, tried on a space suit, discussed engineering occupations, examined a Geographical Information System, learned about radar support structures, toured the NASA control center and discussed range safety, examined parachutes, inspected the construction process of a building, and learned about their sponsors' jobs.

Several people spent hours, outside of work, preparing for the day. To the many NASA and Navy employees who helped make the day a success, we are grateful.

Children and chaperones described the day as "fun" and "fascinating."



Retirement Planning

Thinking about your future? Consider attending a retirement planning class. This highly acclaimed class helps participants understand what their choices are and how to achieve their goals. Participants hear the latest details and options from topic experts.

Retirement Planning at Any Age is a two day class that will be offered at Wallops on May 18 & 19. This sixteen hour class is meant for any civil servant in the FERS program and covers such topics as: retirement system benefits; Social Security; Thrift Savings Plan (TSP); insurance needs, benefits and options to include FEGLI and FEHBP; financial planning; estate planning; legal aspects; and more! This class focuses on long-and short-term planning.

The class is Center-funded (no cost to the Directorates). Training requests from Code 800 should be routed through Sherry Kleckner, Code 800. Non-NASA Federal employees may register by submitting a copy of their Training Request and a prepared Purchase Order to Laura Potler at Code 114. For further information, contact Laura Potler, x66-4853 or Sherry Kleckner, x1204.

BLOOD PRESSURE  
SCREENING  
FOR ALL EMPLOYEES

Monday through Friday, 1 to 4 p.m. at the Health Unit, Building F160 during May.

Call Dianne Hargrove, x1336

Tickets Available

Tickets for Busch Gardens and Water Country USA 1998 are now available and can be purchased at the Exchange, Building E-2. Hours of operation are Monday through Friday, 8:30 a.m. to 4 p.m.

Busch Gardens

Adult tickets \$27.50  
Youth tickets \$21.50

Water Country USA:

Adult tickets \$21.50  
Youth tickets \$14.95

For further information, call Pam Milbourne, x2020.

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